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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,558	09/30/2003	Bruce D. Lawrey	Mo-6576/MD-00-47-PU	6530
157	7590	01/24/2006		
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			EXAMINER SERGENT, RABON A	
			ART UNIT	PAPER NUMBER

1711

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,558

Applicant(s)

LAWREY, BRUCE D.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40, 53 and 54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40, 53 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/30/03, 5/23/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Applicant's election without traverse of Group II, claims 1-40, 53, and 54 in the reply filed on October 28, 2005 is acknowledged.

2. Claims 1-40, 53, and 54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, with respect to claims 1 and 20, applicant has failed to specify the type of percent (i.e.; weight percent) for the NCO group content value.

Secondly, with respect to claims 1 and 20, applicant has failed to distinguish the glycol component from the diol component within a)ii). This position is logical in view of the fact that glycols, by definition, are diols.

Thirdly, with respect to claims 1, 12, 13, 20, 31, and 32, applicant has failed to specify the basis for the claimed mole percent values. It cannot be determined if the mole percent values are based on mixture b) or some other entity.

Fourthly, with respect to claims 2, 10, 14, 18, 19, 21, 29, 33, 37, and 38, applicant's Markush groups are improper, in that the species have not been recited in the alternative. See MPEP 2173.05(h)I.

Fifthly, with respect to claims 39, 40, 53, and 54, it is unclear what meaningful limitation is conveyed by the language, "scientific" and "medical". It is unclear how a scientific glove differs from a medical glove, and it is further unclear how these respective gloves differ from gloves in general.

Sixthly, the methods of claims 39 and 53 are indefinite, because the methods fail to recite definitive process steps.

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Lastly, claims 53 and 54 depend from cancelled claims.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-11, 14-30, and 33-38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 5,708,118.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because each claim set is drawn to an amine extended polyetherurethaneurea produced from equivalent reactants. Consistent with applicant's disclosure at page 13 of the specification, the position is taken that the chain extender mixture may comprise 100% ethylene diamine.

5. Claims 1-38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,624,281. Although the conflicting claims are not identical, they are not patentably distinct from each other because each claim set is drawn to an amine extended polyetherurethaneurea produced from equivalent reactants.

6. Claims 1-38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,903,179. Although the conflicting claims are not identical, they are not patentably distinct from each other because each claim set is drawn to an amine extended polyetherurethaneurea produced from equivalent reactants.

7. Claims 1-38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,737,497. Although the conflicting claims are not identical, they are not patentably distinct from each other because each claim set is drawn to an amine extended polyetherurethaneurea produced from equivalent reactants.

8. Claims 1-38 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 11/017,090. Although the conflicting claims are not identical, they are not patentably distinct

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from each other because each claim set is drawn to an amine extended polyetherurethaneurea produced from equivalent reactants.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-11, 14-30, and 33-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Seneker et al. ('441 or '118 or '357).

Patentees disclose the production of amine extended polyetherurethaneureas, wherein a prepolymer, having an NCO content that meets that claimed and produced from the reaction of an isocyanate with a polyol blend, wherein one of the polyols of the blend is an ultra-low monol diol having the claimed amount of unsaturation, is chain extended with at least one diamine, preferably ethylene diamine. Patentees further disclose that chain extension occurs in the

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presence of a polar, aprotic solvent. See abstract and columns 6-10 within the references.

Consistent with applicant's disclosure at page 13 of the specification, the position is taken that the chain extender mixture may comprise 100% ethylene diamine.

11. Claims 1-11, 14-30, and 33-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Lawrey et al. ('163).

Patentees disclose the production of amine extended polyetherurethaneureas, wherein a prepolymer, having an NCO content that meets that claimed and produced from the reaction of an isocyanate with a polyol blend, wherein one of the polyols of the blend is an ultra-low monol diol having the claimed amount of unsaturation, is chain extended with at least one diamine, preferably ethylene diamine. Patentees further disclose that chain extension occurs in the presence of a polar, aprotic solvent. See abstract and columns 5-9 within the reference.

Consistent with applicant's disclosure at page 13 of the specification, the position is taken that the chain extender mixture may comprise 100% ethylene diamine.

12. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seneker et al. ('441 or '118 or '357) or Lawrey et al. ('163).

Patentees disclose the production of amine extended polyetherurethaneureas, wherein a prepolymer, having an NCO content that meets that claimed and produced from the reaction of an isocyanate with a polyol blend, wherein one of the polyols of the blend is an ultra-low monol diol having the claimed amount of unsaturation, is chain extended with diamine. Patentees disclose that the chain extender is preferably a mixture of diamines, wherein ethylene diamine is preferably the major component, and it is noted that patentees disclose asymmetric diamines that correspond to those claimed. Patentees further disclose that chain extension occurs in the

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presence of a polar, aprotic solvent. See abstract and columns 6-10 within the Seneker et al. references. See abstract and columns 5-9 within Lawrey et al.

13. Though patentees fail to disclose applicant's specifically claimed diamine blend of ethylene diamine and asymmetric diamines, the position is taken, in view of patentees' disclosure of asymmetric diamines and a diamine blend based on ethylene diamine, that it would have been *prima facie* obvious to cure the prepolymers of references using a blend of a major amount of ethylene diamine and one of the additionally disclosed diamines, such as the asymmetric diamines, so as to arrive at the instant invention.

14. Claims 1-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Lawrey et al. ('497).

Patentees disclose the production of amine extended polyetherurethaneureas, wherein a prepolymer, having an NCO content that meets that claimed and produced from the reaction of an isocyanate with a polyol blend, wherein one of the polyols of the blend is an ultra-low monol diol having the claimed amount of unsaturation, is chain extended with a blend of diamines, wherein the blend comprises a major amount of ethylene diamine and a minor amount of aliphatic, asymmetric diamines. Patentees further disclose that chain extension occurs in the presence of a polar, aprotic solvent. See abstract and columns 5-8 within the reference.

15. Claims 39, 40, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seneker et al. ('441 or '118 or '357) or Lawrey et al. ('497 or '163), each in view of Alsaffar ('602) or GB 2316948.

As aforementioned within paragraphs 10-14, the primary references are considered to at the least render applicant's amine extended polyetherurethaneurea *prima facie* obvious; however,

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the primary references fail to disclose the use of the composition for the production of gloves or condoms. Still, the position is taken that it would have been obvious to utilize these compositions for the production of such articles, in view of the teachings of the secondary references. The secondary references disclose that polyurethanes, including amine extended polyurethanes produced from polyols having low unsaturation, yield gloves and condoms having properties similar to those produced from natural rubber. See abstract and columns 2-4 within Alsaffar. See abstract and pages 4-6 within GB 2316948. Given the similarities of the compositions of the primary and secondary references, the position is taken that it would have been obvious to utilize the compositions of the primary references to produce the claimed articles.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.



**RABON SERGENT
PRIMARY EXAMINER**

R. Sergent
January 22, 2006